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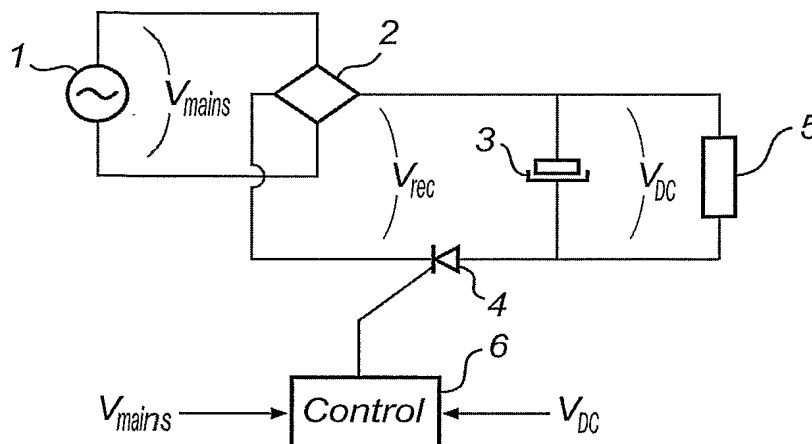
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(54) Title: VOLTAGE REGULATING CIRCUIT



(57) **Abstract:** A voltage regulating circuit comprising a rectifier (2) for receiving an AC voltage (V_{mains}) and for generating a rectified AC voltage (v_{rec}), and a capacitor (3) connected in parallel with said rectified AC voltage for providing a DC voltage (V_{DC}) over a load (5), characterized by a unidirectional current switch (4) provided between the rectifier (2) and the capacitor (3), and a control block (6) arranged to activate the switch (4) at selected instances (7) during negative slopes of the rectified AC voltage (v_{rec}) so that said DC voltage (V_{DC}) does not exceed a predetermined voltage limit. By controlling the voltage provided by the rectified mains, the DC voltage can be regulated to any preset value (lower than the AC mains peak value). The inventive voltage stabilizer will guarantee a desired constant DC load voltage value for different mains peak input voltages and under wide range of load variations. Thereby a converter driven by this voltage can be more optimized or even be unregulated.

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